

COUNTRY ANALYSIS BRIEFS

Equatorial Guinea

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Equatorial Guinea's economy has grown rapidly since the country began exporting oil in 1995.

Background

Equatorial Guinea has experienced rapid economic growth due to the discovery of large offshore oil reserves, and has become Sub-Saharan Africa's third largest oil exporter after Nigeria and Angola. According to the World Bank, oil revenues increased in value from \$3 million in 1993 to \$190 million in 2000 to \$3.3 billion in 2006. From 2002 to 2006 the country experienced an average real annual GDP growth of 15.8 percent. Oil exports currently represent over 90 percent of total export earnings. However, a slowdown in oil production has caused GDP growth to decelerate to 6.8 percent in 2007.

Equatorial Guinea is a sub-Saharan African country consisting of a mainland area (Rio Muni province) and a series of islands. The country's capital, Malabo, is located on Bioko Island, approximately 25 miles off the coast of Cameroon.



Despite the rapid growth in real GDP, allegations abound over how the Equatoguinean government has misappropriated its oil revenues. While the government has made some infrastructure improvements to bolster the oil industry, the average Equatoguinean has yet to experience a higher standard of living from the oil revenues as evidenced by the country's ranking of 120 (out of 177) on the human development index in 2006. In January 2005, Equatorial Guinea pledged to increase transparency in its oil revenues and is currently implementing the Extractive Industries Transparency Initiative (EITI). Currently, foreign oil companies are beginning to make development related investments in education (Amerada Hess) and malaria prevention (Marathon Oil and Noble Energy).

Territorial Disputes

In recent years, Equatorial Guinea and its neighbors have expanded their offshore oil exploration, which has increased the importance of maritime borders. In March 1999, President Obiang unilaterally adopted an equidistant median line that defined territorial boundaries as stipulated under the U.N. Convention on the Law of the Sea. Cameroon, Sao Tome & Principe, and Nigeria

accepted the decision as an improvement over the often disputed traditional boundaries.

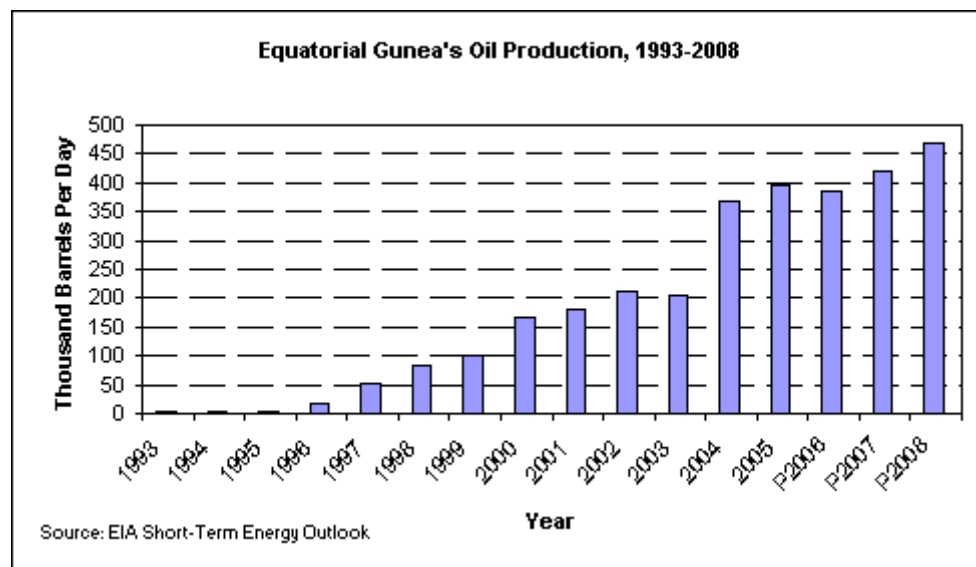
Since the 1970's, Equatorial Guinea and Gabon have disputed the ownership of three islands in the Gulf of Guinea, including Mbagne Island. In July 2004, the two countries reached an agreement allowing joint oil exploration in the disputed territories. In February 2006, the presidents of both countries met in Geneva, Switzerland and under U.N. mediation they agreed to resolve any major outstanding border issues by 2007.

Oil

Equatorial Guinea is the third largest oil producer in Sub-Saharan Africa.

According to the *Oil and Gas Journal*, Equatorial Guinea had estimated proved oil reserves of 1.1 billion barrels as of January 2007. The majority of these reserves are located offshore in the oil-rich Gulf of Guinea. Since the 1995 discovery of the Zafiro field, Equatorial Guinea's oil production has increased dramatically. In 1995, oil production was 5,000 barrels per day (bbl/d), which increased to 385,970 b/d in 2006. While there has been some discussion of capping oil production in order to extend the life of the fields and prevent economic instability, the government appears reluctant to implement any measures that would slow development.

Equatorial Guinea's director-general for Mines, Industry and Energy said that he expected the country's oil production capacity to increase to 570,000 bbl/d in 2007, while EIA believes these estimates are too optimistic and expects production to rise to about 420,000 bbl/d.



Section Organization

The Ministry of Mines, Industry and Energy is the overall regulatory body for the petroleum industry in Equatorial Guinea. The Equatoguinean government created a national oil company (GEPetrol) that became operational in 2002. GEPetrol's primary focus is to manage the interest stakes of the Equatoguinean government in various production sharing contracts (PSAs) and joint ventures (JVs) with foreign oil companies. The company can also participate in oil exploration and production activities outside Equatorial Guinea.

In recent years, the government has passed legislation to increase local participation (ownership) to a minimum of 35 percent in foreign investments. In the hydrocarbon sector, this requirement can be met with a 35 percent share allotted to the national oil company, GEPetrol. As a result, the national oil and gas companies (Sonagas) are expected to play a more substantive role in oil and gas development.

Production

Zafiro Field

In 1995, ExxonMobil and Ocean Energy discovered the Zafiro field, which is located northwest of Bioko Island. Zafiro was the first deepwater field to be brought on stream in West Africa and is

currently the main producing field in Equatorial Guinea. Zafiro is currently operated by an ExxonMobil-led consortium that includes Devon Louisiana and GEPetrol. According to the Energy Intelligence Group (EIG) the field contains estimated recoverable reserves of over 400 million barrels, and is Equatorial Guinea's largest oil producer, with an output of 245,000 bbl/d for the first half of 2006.

Zafiro, as of 2005, has been blended with Topacio and marketed as "New Zafiro", a low-sulfur distillate rich crude oil. Zafiro was traditionally sold across the US, Europe and Asia-Pacific markets, but recently China has emerged as its single most important purchaser, buying over half its export volumes.

Other Fields

Ceiba, Equatorial Guinea's second major producing oil field, is located just offshore of Rio Muni in exploration Block G. The field contains an estimated 113 million barrels of reserves and began production in December 2000. Production has been below expectations. In 2005, around 40,000 bbl/d of oil was produced after a program of water injection to repressurize the reservoir. The field is operated by Amerada Hess, with partners Tullow Oil and GEPetrol.

Alba, Equatorial Guinea's third largest field is located 12 miles north of Bioko Island. According to the EIG, Alba is a major condensate field containing an estimated 400 million barrels of liquids. The field currently produces between 65,000 and 75,000 bbl/d of condensates and 20,000 bbl/d of liquefied petroleum gas (LPG). Marathon Oil Corporation serves as operator of Alba field along with GEPetrol.

Additional production could come from Amerada Hess' Northern Block G field, expected to come on stream at the end of 2007. According to EIG, initial production is expected to be around 60,000 bbl/d.

Exploration and Field Development

In 2005, the Equatoguinean government planned to begin a new licensing round for offshore acreage, including parts of Blocks F, G, H and L in the Rio Muni Basin. After several delays, the licensing round went ahead in September 2007. Blocks were awarded to India's Oil and Natural Gas Corporation, the Nigerian National Petroleum Corporation, and other independent producers. Prior to the licensing round, PetroSA, the South African state oil company was allocated three blocks for the country's role in preventing a coup attempt against the government of Equatorial Guinea in 2004.

Asian firms from China, India and the Philippines are especially interested in gaining exploration rights. In February 2006, the China National Offshore Oil Company (CNOOC) signed a production sharing agreement (PSA) for offshore acreage in Equatoguinean waters. Under the contract, CNOOC and GEPetrol will have the rights to explore the acreage over the next five years.

Downstream

As a result of poverty and lack of infrastructure, national oil consumption is limited. Domestic petroleum consumption for 2006 was estimated at 1,044 bbl/d, primarily in the form of motor fuel. Getotal, jointly owned by Total and the government of Equatorial Guinea, has a monopoly on the distribution of petroleum products, all of which are imported due to a lack of refining capacity.

The Luba oil port became operational in 2002. It is located next to the town of Luba on the west side of Bioko Island. The Equatoguinean government hopes that offshore oil and gas companies will use the Luba port as their transportation hub. In addition, a new oil port in Malabo is currently being constructed to relieve congestion at the main terminal. Oil companies located on the Island of Bioko are expected to use the port once it is completed. Pils (Netherlands) will operate the port for 15 years, after which the Equatoguinean government will become its operator.

Natural Gas

According to the OGJ, Equatorial Guinea had 1.3 trillion cubic feet (Tcf) of proven natural gas reserves as of January 1, 2007. The majority of the reserves are located offshore Bioko Island, primarily in the Alba and Zafiro associated natural gas fields. From 2001 - 2006, Equatoguinean natural gas production increased rapidly from 1 billion cubic feet (Bcf) to 46 Bcf as new projects came online. The country is currently marketing itself as a regional gas industry hub based on the recent completion of an LNG facility on Bioko Island and plans for its expansion.

***Equatorial Guinea's
natural gas
production continues
to increase.***

Sector Organization

Following a decree signed by President Obiang in January 2005, the government announced the creation of a state natural gas company, Sociedad Nacional de Gas de Guinea Ecuatorial (Sonagas, G.E.). The responsibilities of Sonagas include managing gas assets and developing an industrial and residential natural gas market, as well as the treatment, distribution, marketing, and exportation of natural gas reserves. As is the case with oil companies, the government requires a minimum local participation of 35 percent in all foreign investments which can be substituted by allotting shares to the state companies.

Exploration and Production

Natural gas production in Equatorial Guinea has expanded rapidly in the last five years in response to new investments by major stakeholders in the Alba field. Alba, the country's largest natural gas field, contains 1.3 trillion cubic feet Tcf of proven reserves, with probable reserves estimated at 4.4 Tcf or more. Throughout the 1990s, oil companies primarily produced condensate and flared the associated natural gas. Currently, the Alba field produces around 250 million cubic feet per day (MMcf/d) of wet natural gas. Marathon Oil (operator) has a 63 percent interest in the field, while Noble Energy holds 34 percent interest and GEPetrol has the remaining three percent.

In October 2005, Noble Energy made a natural gas discovery in Block O. The company is currently deciding whether or not to drill additional exploration wells on the block. Noble Energy holds a 45 percent interest in Block O and is joined with partners GEPetrol (30 percent) and Glencore Exploration (25 percent).

Liquefied Natural Gas (LNG)

Marathon Oil Corporation and its partners completed Train 1 of the \$1.4 billion Punta Europa LNG facility on Bioko Island in May 2007. The plant is expected to process approximately 3 trillion cubic feet of dry gas from the Marathon-operated Alba Field. The plant's initial output was delivered under an agreement with BG Gas Marketing LTD to supply 3.4 million metric tons of LNG per year for 17 years. BG, in turn, is expected to supply the majority of the LNG to the U.S. terminal at Lake Charles, Louisiana but the company has distribution flexibility in determining where the LNG will be delivered.

Marathon is planning a second LNG train as Equatorial Guinea finalizes arrangements to process stranded gas from Cameroon and Nigeria. Agreements have already been signed with Cameroon, which is believed to have sufficient gas reserves to supply a minimum of 200 MMcf/d of gas by 2010 and Nigeria who will supply 600-800 MMcf/d. Additional LNG potential exists as Equatorial Guinea implements its policy to end gas flaring.

Electricity

Equatorial Guinean's electricity generation is unreliable due to aging equipment.

On both Bioko Island and the mainland, electricity is generated by a combination of thermal and hydroelectric plants. The country's total electricity generation and consumption in 2005 was 0.03 billion kilowatthours (Bkwh).

Sector Organization

Equatorial Guinea's electricity sector is owned and operated by the state-run monopoly, Sociedad de Electricidad de Guinea Ecuatorial S.A. (SEGESA). SEGESA operates the country's two small electricity transmission networks, which comprise approximately 80 miles of high tension lines. The network on the mainland serves the suburban area of Bata, while the second, older distribution system on Bioko Island connects Malabo to the port of Luba. The government has plans to expand this grid by 2010. SEGESA's power supply is unreliable due to aging equipment—consumers often experience prolonged blackouts. Small diesel and gasoline powered generators are widely used as a back-up source of power supply. The Equatoguinean government has attempted to privatize SEGESA in an effort to increase competition and efficiency in the electricity sector; however, foreign companies have shown little interest in the state company.

The expansion of natural gas production at the Alba field in recent years has provided a convenient fuel source for new power generation in the country. The 10.4-MW, natural gas-fired Punta Europa plant began operation in 1999, supplying electricity to Bioko Island. After upgrades in 2000, the potential total capacity of Punta Europa rose to 28 MW, yet output remains constrained by the original capacity of the outgoing transmission line. An additional 4-6 MW of generation capacity is currently under construction at the Atlantic Methanol Production Company

(AMPCO) complex on Bioko Island.

Profile

Energy Overview

Proven Oil Reserves (1/1/07 – Oil & Gas Journal)	1.1 billion barrels
Oil Production (2006E)	386 thousand barrels per day
Oil Consumption (2006E)	1,044 barrels per day
Net Oil Exports (2006)	354 thousand barrels per day
Proven Natural Gas Reserves (January 1, 2007E)-O&G Journal	1.3 trillion cubic feet
Natural Gas Production (2006E)	45.9 billion cubic feet
Natural Gas Consumption (2006E)	46 billion cubic feet
Electricity Installed Capacity (2005)	0.013 million kilowatts
Electricity Generation (2005E)	28 million kilowatthours
Electricity Consumption (2005E)	30 million kilowatthours
Total Per Capita Energy Consumption (2004)	12.1 million Btus

Environmental Overview

Energy-Related Carbon Dioxide Emissions (2005)	4.87 million metric tons
Per-Capita, Energy-Related Carbon Dioxide Emissions (2004)	7.4 metric tons
Environmental Issues	tap water is not potable; deforestation
Major Environmental Agreements	party to: Biodiversity, Climate Change, Climate Change-Kyoto Protocol, Desertification, Endangered Species, Hazardous Wastes, Law of the Sea, Ship Pollution signed, but not ratified: none of the selected agreements

Oil and Gas Industry

Organization	GE Petrol; Sonagas (national oil and gas companies)
Major Oil/Gas Ports	Luba Port, second port (Malabo) under construction
Major Oil Fields	Zafiro (270,000 bbl/d), Ceiba (45,000 bbl/d), Alba (65,000 bbl/d of condensates)
Major Natural Gas Fields	Alba

* The total energy consumption statistic includes petroleum, dry natural gas, coal, net hydro, nuclear, geothermal, solar, wind, wood and waste electric power. The renewable energy consumption statistic is based on International Energy Agency (IEA) data and includes hydropower, solar, wind, tide, geothermal, solid biomass and animal products, biomass gas and liquids, industrial and municipal wastes. Sectoral shares of energy consumption and carbon emissions are also based on IEA data.

**GDP figures from OECD estimates based on purchasing power parity (PPP) exchange rates.

Links

EIA Links

[EIA - Country Information on Equatorial Guinea](#)

[CIA World Factbook - Equatorial Guinea](#)

[U.S. State Department's Country Page - Equatorial Guinea](#)

[U.S. State Department's Consular Information Sheet - Equatorial Guinea](#)

[U.S. Trade with Equatorial Guinea](#)

General Information

[Africa News Service: Equatorial Guinea](#)

[MBendi Information Service: Equatorial Guinea's oil and gas sector](#)

[Strategic Road: Equatorial Guinea](#)

Associations and Institutions

[African Development Bank: Equatorial Guinea](#)

[African Studies: University of Pennsylvania](#)

[Columbia University African Studies: Equatorial Guinea](#)

[Franc Zone Investment: Equatorial Guinea \(In French\)](#)

[International Monetary Fund - Equatorial Guinea](#)

[Stanford University Africa South of the Sahara Country Pages: Equatorial Guinea](#)

[Transparency International – Equatorial Guinea](#)

[World Bank - Equatorial Guinea](#)

Oil and Natural Gas

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Sources

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Economist Intelligence Unit ViewsWire

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Natural Gas Week

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U.S. Energy Information Administration

U.S. News & World Report

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